

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/051329

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B10/155

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B G01B G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 718 990 A (AT & T CORP) 26 June 1996 (1996-06-26) abstract column 4, lines 40-56 column 5, lines 21-57 column 6, lines 8-35 figures 1,3,4 -----	1-14
A	WO 01/25847 A (MASSACHUSETTS INST TECHNOLOGY) 12 April 2001 (2001-04-12) abstract page 2, line 20 - page 3, line 9 page 4, lines 15-27; figures 1,3,5 ----- -/-	1-14

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

25 November 2004

Date of mailing of the International search report

03/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Muñoz Sanchez, J-M

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/051329

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/196508 A1 (WEI HAIQING ET AL) 26 December 2002 (2002-12-26) abstract paragraphs '0002!, '0011!, '0021!, '0071!, '0081!; figures 15,16 -----	1-14
A	US 4 753 529 A (LAYTON MICHAEL R) 28 June 1988 (1988-06-28) the whole document -----	

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/EP2004/051329

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0718990	A	26-06-1996		US 5625722 A CA 2161821 A1 EP 0718990 A2 JP 8254673 A		29-04-1997 22-06-1996 26-06-1996 01-10-1996
WO 0125847	A	12-04-2001		US 6616353 B1 WO 0125847 A1		09-09-2003 12-04-2001
US 2002196508	A1	26-12-2002		NONE		
US 4753529	A	28-06-1988		NONE		